

DERWENT-ACC-NO: 1994-005312

DERWENT-WEEK: 199401

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Evaporation type cooling of
semiconductor devices used
on traction unit and power supply
substations - has pipes
of condenser bent in form of frames
and forming channels
for liq in vol. of evaporator

INVENTOR: BUYANOV, A B; KISELEV, I G ; ZHUKOV, P L

PATENT-ASSIGNEE: LENG D RAIL ENG INST[LERE]

PRIORITY-DATA: 1991SU-4951931 (May 4, 1991)

PATENT-FAMILY:

| PUB-NO | PAGES | PUB-DATE | MAIN-IPC |
|---------------|-------------|-------------------|----------|
| SU 1781735 A1 | | December 15, 1992 | N/A |
| 004 | H01L 025/00 | | |

APPLICATION-DATA:

| PUB-NO | APPL-DESCRIPTOR | APPL-NO |
|----------------|-----------------|---------|
| SU 1781735A1 | N/A | |
| 1991SU-4951931 | May 4, 1991 | |

INT-CL (IPC): H01L023/427, H01L025/00

ABSTRACTED-PUB-NO: SU 1781735A

BASIC-ABSTRACT:

The heat dissipation cycle from the semiconductor device
(2) to an ambient air
is continuously carried out during a current load. If a
tubular condenser (4)
has several pipes in the form of frames, hence the boiling
and condensation
processes a liq intermediate heat carrier is performed

parallel for each frame.
The heat dissipated in the semiconductor device (2) is transferred to evaporator (1) designed as a packet of pipes.

USE/ADVANTAGE - In power electronics, for cooling of semiconductor devices of traction substation of underground trains, rectifier plants of electric and diesel locomotives. Improved efficiency and reliability of operation.
Bul.46/15.12.92

CHOSEN-DRAWING: Dwg.1/4

DERWENT-CLASS: U11 V04

EPI-CODES: U11-D02D; V04-T03;

